

**AMENDMENTS IN THE CLAIMS**

Please amend the claims as indicated below.

1. – 35. (Canceled)

36. (Previously Presented) A method for managing interaction with a presentation of a tree structure in a graphical user interface, the method comprising the steps of:

displaying a tree structure on a first portion of a graphical user interface, the tree structure comprising a root object, one or more first-level objects, one or more second-level objects, and one or more third-level objects, wherein:

the tree structure correlates to a model of a printed circuit board used in an x-ray inspection control system, the printed circuit board having one or more components having one or more pins soldered to the printed circuit board;

the root object corresponds to a family object that specifies a type of solder joint;

the one or more first-level objects correspond to a package object that specifies a type of component;

the one or more second-level objects correspond to an instance that specifies a unique designator for a package; and

the one or more third-level objects correspond to a pin object that specifies a unique pin number for a specific component; and

receiving a search request for an object in the tree structure having a predefined value via a second portion of the graphical user interface;

displaying a search result in a third portion of the graphical user interface, the search result comprising one or more locations that satisfy the search request; and

in response to selection of one of the locations, modifying the tree structure to display the selected location of the object having the predefined value.

37. (Previously Presented) The method of claim 36, wherein the step of modifying the tree structure to display the selected location comprises expanding the tree structure.

38. (Previously Presented) The method of claim 36, wherein the step of modifying the tree structure to display the selected location comprises highlighting the object having the predefined value.

39. (Previously Presented) The method of claim 36, wherein the step of receiving a search request for an object comprises the step of receiving text via a text box displayed in the second portion of the graphical user interface.

40. (Previously Presented) The method of claim 36, wherein the third portion of the graphical user interface comprises a pop-up window.

41. (Previously Presented) The method of claim 36, wherein the tree structure comprises one or more parent objects, at least one of the parent objects having one or more child objects.

42. (Previously Presented) The method of claim 41, wherein the tree structure represents the contents of a computer.

43. (Previously Presented) A system for managing interaction with a presentation of a tree structure in a graphical user interface, the system comprising:

logic configured to:

display a tree structure on a first portion of a graphical user interface, the tree structure comprising a root object, one or more first-level objects, one or more second-level objects, and one or more third-level objects, and wherein:

the tree structure correlates to a model of a printed circuit board used in an x-ray inspection control system, the printed circuit board having one or more components having one or more pins soldered to the printed circuit board;

the root object corresponds to a family object that specifies a type of solder joint;

the one or more first-level objects correspond to a package object that specifies a type of component;

the one or more second-level objects correspond to an instance that specifies a unique designator for a package; and

the one or more third-level objects correspond to a pin object that specifies a unique pin number for a specific component; and

receive a search request for an object in the tree structure having a predefined value via a second portion of the graphical user interface;

display a search result in a third portion of the graphical user interface, the search result comprising one or more locations that satisfy the search request; and

modify, in response to selection of one of the locations, the tree structure to display the selected location of the object having the predefined value;

a processing device configured to implement the logic; and

a display device configured to support the graphical user interface.

44. (Previously Presented) The system of claim 43, wherein the logic is further configured to modify the tree structure to display the selected location by expanding the tree structure.
45. (Previously Presented) The system of claim 43, wherein the logic is further configured to modify the tree structure to display the selected location by highlighting the object having the predefined value.
46. (Previously Presented) The system of claim 43, wherein the logic is further configured to receive the search request for an object via a text box displayed in the second portion of the graphical user interface.
47. (Previously Presented) The system of claim 43, wherein the third portion of the graphical user interface comprises a pop-up window.
48. (Previously Presented) The system of claim 43, wherein the tree structure comprises one or more parent objects, at least one of the parent objects having one or more child objects.
49. (Previously Presented) The system of claim 48, wherein the tree structure represents the contents of a computer.
50. (Previously Presented) A computer program embodied on a computer-readable medium for managing interaction with a presentation of a tree structure in a graphical user interface, the computer program comprising logic configured to:

display a tree structure on a first portion of a graphical user interface, the tree structure comprising a root object, one or more first-level objects, one or more second-level objects, and one or more third-level objects, and wherein:

the tree structure correlates to a model of a printed circuit board used in an x-ray inspection control system, the printed circuit board having one or more components having one or more pins soldered to the printed circuit board;

the root object corresponds to a family object that specifies a type of solder joint;

the one or more first-level objects correspond to a package object that specifies a type of component;

the one or more second-level objects correspond to an instance that specifies a unique designator for a package; and

the one or more third-level objects correspond to a pin object that specifies a unique pin number for a specific component; and

receive a search request for an object in the tree structure having a predefined value via a second portion of the graphical user interface;

display a search result in a third portion of the graphical user interface, the search result comprising one or more locations that satisfy the search request; and

modify, in response to selection of one of the locations, the tree structure to display the selected location of the object having the predefined value.

51. (Previously Presented) The computer program of claim 50, wherein the logic is further configured to modify the tree structure to display the selected location by expanding the tree structure.

52. (Previously Presented) The computer program of claim 50, wherein the logic is further configured to modify the tree structure to display the selected location by highlighting the object having the predefined value.

53. (Previously Presented) The computer program of claim 55, wherein the logic is further configured to receive the search request for an object via a text box displayed in the second portion of the graphical user interface.

54. (Previously Presented) The computer program of claim 50, wherein the third portion of the graphical user interface comprises a pop-up window.

55. (Previously Presented) The computer program of claim 50, wherein the tree structure comprises one or more parent objects, at least one of the parent objects having one or more child objects.

56. (Previously Presented) The computer program of claim 55, wherein the tree structure represents the contents of a computer.

57. (Previously Presented) A system for managing interaction with a presentation of a tree structure in a graphical user interface, the system comprising:

means for displaying a tree structure on a first portion of a graphical user interface, the tree structure comprising a root object, one or more first-level objects, one or more second-level objects, and one or more third-level objects, and wherein;

the tree structure correlates to a model of a printed circuit board used in an x-ray inspection control system, the printed circuit board having one or more components having one or more pins soldered to the printed circuit board;

the root object corresponds to a family object that specifies a type of solder joint;

the one or more first-level objects correspond to a package object that specifies a type of component;

the one or more second-level objects correspond to an instance that specifies a unique designator for a package; and

the one or more third-level objects correspond to a pin object that specifies a unique pin number for a specific component; and

means for receiving a search request for an object in the tree structure having a predefined value via a second portion of the graphical user interface;

means for displaying a search result in a third portion of the graphical user interface, the search result comprising one or more locations that satisfy the search request; and

means for modifying the tree structure to display the selected location of the object having the predefined value in response to selection of one of the locations.

58. (Previously Presented) The system of claim 57, wherein the means for modifying the tree structure logic expands the tree structure.